APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,251	03/17/2004	Joe Hasiewicz	7060/82548	5145

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EXAMINER
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ART UNIT	PAPER NUMBER
2167	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.</td><td>Applicant(s)</td></tr>
<tr><td>10/802,251</td><td>HASIEWICZ ET AL.</td></tr>
<tr><td></td><td>Examiner</td><td>Art Unit</td></tr>
<tr><td></td><td>Susan F. Rayyan</td><td>2167</td></tr>
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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *12 February 2007.*

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-8, 13-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-8 and 13-19* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 9-12 are canceled.

2.   Claims 14-19 are newly added claims.

3.   Claims 1-8, 13-19 are pending.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Us Patent Number 6,892,193 B1 issued to James P. Herzog at al ("Herzog") in

view of US 2003/0055666 issued to Nicholas E. Roddy et al ("Roddy").

As per claim 1 Herzog teaches:

an asset fleet health monitoring system (see Abstract and column 5, lines 10-15);

a sensor data feed module for providing multivariate sensor data from a plurality of fleet

assets (column 11, lines 10-11, acquire current set of signal data from monitored asset

and column 4, lines 1-3, sensor);

a database for storing empirical models of assets in the fleet (Figure 5, Reference

Number 52 and column 11, lines 10-25, models);

an estimation engine disposed to generate estimated sensor values and residuals in

response to receiving from the data feed an observation of multivariate sensor data for

an asset in the fleet (column 11, lines 28-34, estimate values and residuals , process

estimation model), using a corresponding empirical model for the asset stored in said

database (column 8, lines 38-39 and column 8, lines 50-59, model for asset);

an incident diagnostics engine module responsive at least to said residuals to

determine whether an incident should be registered for said asset (column 11, lines 38-

44, residuals processed by fault detection module to determine a fault indication).

Herzog does not explicitly teach a graphical interface module providing an

exception-based view of all assets currently having registered incidents, said view

functional upon selection of an asset from said view to display currently registered

incidents for the selected asset. Roddy does teach limitation (at paragraph 32, lines 1-8

as web page displays a each mobile asset on a map with color such as yellow to

indicate an asset exhibiting an anomaly) to effectively integrate diverse elements in the

management of remote assets . It would have been obvious to a person of ordinary skill

in the art at the time of the invention was made to modify Herzog with a graphical

interface module providing an exception-based view of all assets currently having

registered incidents, said view functional upon selection of an asset from said view to

display currently registered incidents for the selected asset to effectively integrate

diverse elements in the management of remote assets (paragraph 6, lines 1-3).

As per claim 2, same as claim arguments above and Herzog teaches:

 wherein said estimation engine generates estimated sensor values according to a

nonparametric kernel-based method (column 9, lines 20-25).

As per claim 3, same as claim arguments above and Herzog teaches:

wherein said estimation engine generates estimated sensor values according to a

similarity-based modeling method (column 13, lines 29-34).

As per claim 4, same as claim arguments above and Herzog teaches:

wherein said incident diagnostics engine comprises rule objects having rules and

actions, and executes rules against at least said residuals to determine whether an

incident should be registered for said asset (column 10, line 62, bridging to , column 11,

line 5).

As per claim 5, same as claim arguments above and Herzog teaches:

wherein said incident diagnostics engine has an action stack, and when a rule of a rule

object evaluates to a particular condition, an action of the rule object is added to the

action stack for execution, and where possible actions include registering an incident for

the asset (column 11, lines 7-25, fault true then control action is taken).

As per claim 6, same as claim arguments above and Herzog teaches:

wherein an action of a rule object is to activate another rule object (column 11, lines 45-54).

As per claim 7, same as claim arguments above and Herzog teaches:

further comprising a model creation module for processing historic reference data for an asset to generate a model f or the asset and storing it in said database (column 8, ,lines 50-59, preparing process model with historical data).

As per claim 8, same as claim arguments above and Herzog teaches:

wherein said model creation module is functional to copy reference data and a model for an asset stored in said database for offline model modification, and further functional to copy a modified model into said database and activate it for runtime processing of incoming observations corresponding to the asset (column 5, lines 27-50).

As per claim 14 same as claim arguments above and Roddy teaches:

wherein said exception-based view is functional upon selection of said asset from said view to display at least some of the set of sensor data, estimated sensor values and residuals for said asset (paragraph 89, lines 1-19, as website displays assets and performance data).

As per claim 15 same as claim arguments above and Roddy teaches:

wherein said exception-based view is functional upon selection of a displayed incident

for said asset to display a predetermined set of charts informative of the selected

incident, said charts comprising data from at least one of the set of: sensor data,

estimated sensor values and residuals of said asset (Figure 16, pie chart with sensor

data including idle time).

As per claim 16 same as claim arguments above and Roddy teaches:

wherein said exception-based view is functional upon selection of a currently registered

incident for said asset to display sensor names of sensors of said asset that are

informative of the selected incident (Figures 14-16, and paragraph 90, graphical user

interface allows flexibility).

As per claim 17 same as claim arguments above and Roddy teaches:

wherein said exception-based view is functional upon selection of a sensor name

informative of the selected incident for said asset to display at least one chart of data

selected from the set of sensor data, estimated sensor values and residuals of said

asset(Figures 14-16, and paragraph 90, graphical user interface allows flexibility).

Claim 13, 18-19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog in view of Roddy as applied to claims 1 above, and further in view of US Publication Number 2003/0093521 A1 issued to Steven T. Schlonski et al ("Schlonski").

As per claim 13, same as claim arguments above and Schlonski teaches:

wherein said graphical user interface module is disposed to provide its views in a format viewable in a web browser, and an asset on said exception-based view is hyperlinked to activate a listing of its registered incidents under it in the view (paragraph 20, 32 and Figure 4, status history alert and displaying fault data).

As per claim 18 same as claim arguments above and Herzog in view of Roddy do not explicitly teach said graphical interface module provides said exception-based view of assets ... hierarchical presentation by said graphical interface module of all assets. Schlonski does teach this limitation (paragraph 20, hierarchical view of assets and paragraph 32, fault history view equates to the exception view) to manage the assets of multiple mutually-independent companies. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Herzog with said graphical interface module provides said exception-based view of assets ... hierarchical presentation by said graphical interface module of all assets to manage the assets of multiple mutually-independent companies (paragraph 40, lines 1-5).

As per claim 19 same as claim arguments above and Schlonski teaches:

wherein said hierarchical presentation includes nodes representing a hierarchy level corresponding to a collection of assets, a hierarchy level corresponding to individual assets, and a hierarchy level corresponding to modes of operation of individual assets paragraph 20, hierarchical view of assets).

Response to Arguments

5.　　　Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

It is noted however that the Applicant has argued many features such as (i.e., " a software system having multiple models for monitoring fleets of assets, including fleets that may be best viewed in a hierarchical fashion", "special issues raised in monitoring so many assets with such large data streams ", "interactive real-time equipment health monitoring system", "prospective reports", "watchlist to list current an incipient faults across a fleet of assets"," providing a watchlist of those assets with current problems revealed by a modeling engine", "the watchlist provides for drill-down into the incidents that put the asset on the watchlist, the sensors that are involved in the incident, and the time series charts showing the sensor data and model estimates, and corresponding residuals") which are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Contact Information

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Susan F. Rayyan whose telephone number is 571-272-

1675. The examiner can normally be reached on M-F, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SR
4/21/2007

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